

HEAVY METAL LEAD GUITAR

Volume 1

by Troy Stetina

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ABOUT THE AUTHOR

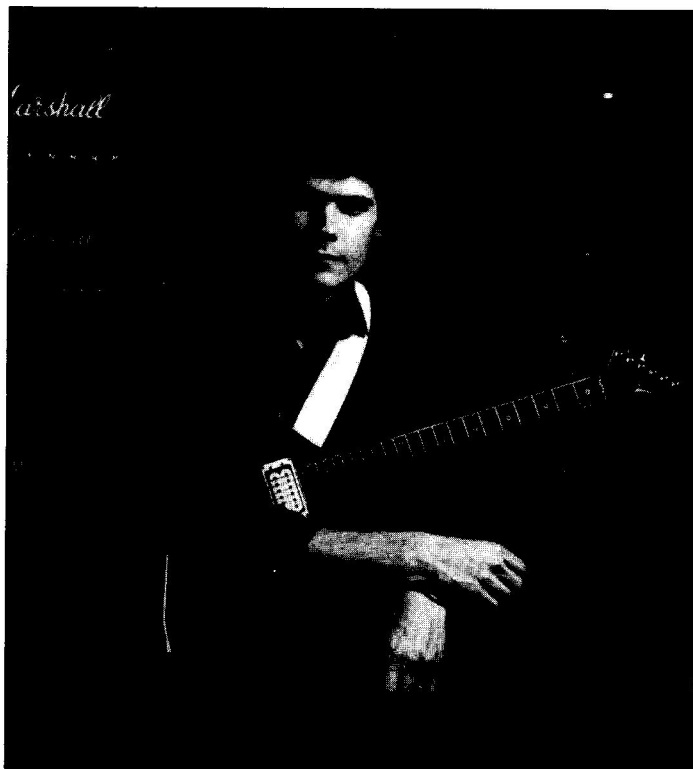


Photo by Robert Fisher

After achieving a gold and silver medal in the 1975 National bicycle Road and Track Championships and another silver medal in the 1978 National Road Championships, Troy Stetina turned from athletics to pursue music full time. Specializing in classically influenced heavy metal, Troy has taught private lessons for several years in Indianapolis, and has recorded and performed with rock bands in the area. He is currently the rock guitar instructor at the Wisconsin Conservatory of Music in Milwaukee.

FOREWORD

The **Heavy Metal Series** is designed to teach you the techniques used by **Van Halen, Randy Rhoads, Yngwie Malmsteen, George Lynch, Jake E. Lee,** and other heavy metal guitarists.

Lead Volumes 1 and 2 offer a comprehensive step-by-step lead guitar method to teach you everything you need to know about soloing.

Each technique is incorporated into **eleven solos** which increase in difficulty throughout the method. The last section in Volume 2 features the entire lead track to the heavy metal instrumental, **"Babylon."**

Many guitarists find that after learning a few of the basics of soloing (the blues scale and several bending techniques) that all of their riffs and solos begin to sound alike. They become bored with their playing and wind up in a rut. To avoid these ruts you must expand your knowledge of the guitar and develop techniques that enhance your ability instead of limit it.

With a little work and this lead method, you can get out of or avoid these kinds of ruts, and your playing will be more expressive, more creative, and more fun.


HOW TO USE THIS BOOK

Heavy Metal Lead Guitar Volume 1 is a companion to Rhythm Guitar Volumes 1 and 2 in the Heavy Metal Series.

Those of you who already have some years of experience and are familiar with reading rhythm notation may begin with the Lead Method. However, if you find that you are having trouble reading rhythms, you should refer back to the section of **Rhythm Guitar** that covers rhythms in more detail.

This book contains six solos in six sections; each section preparing you for its accompanying solo. The solos, "**Open Fire**," "**To The Stage**," "**From The Heart**," "**The Heavy Side**," "**Danger Ahead**," and "**Into The Spotlight**," become progressively more difficult throughout the method.

Volume 2 completes the **Heavy Metal Lead Guitar Method** and features five more solos as well as the entire lead track to the song "**Babylon**."

Always make sure that you are in tune! If your guitar has a floating vibrato system, you should repeat the tuning process several times. When you see the symbol  ,

First, listen to the example on the recording several times, while following along with the written music.

Then, practice very slowly by yourself until you can play evenly and accurately. Speed up as you feel comfortable, but it is more important to play evenly than it is to play fast.

If the example uses a count, play along with the example on the recording.

Each solo begins with an introduction followed by the lead section. After that, the rhythm track repeats – but this time without the lead. After you have learned a solo, practice playing the lead along with the rhythm track.

INTRODUCTION

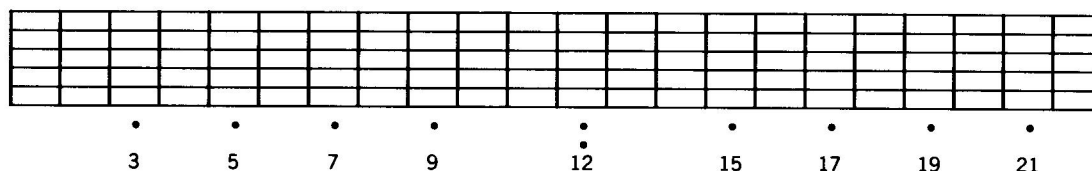
Music in this book is written in tablature (TAB). If you not familiar with reading TAB, please refer to **Rhythm Guitar Volume 1**.

The fingers of the left hand are numbered as follows:

- index finger — 1
- middle finger — 2
- ring finger — 3
- little finger — 4

Downstrokes of the pick are indicated by ▣. Upstrokes are indicated by ▽. These symbols will appear above the staff. All other symbols will be explained as they appear in the book.

To enable you to read tablature more quickly and easily, you can memorize the fret numbers of the dots on the neck.

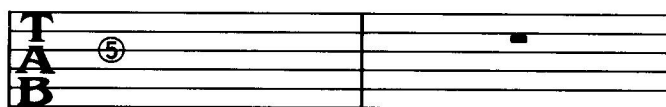


This is especially important when reading notes high on the neck. For example, to find fret number 18 quickly, look to the second dot above 12 (the double dots). This is fret 17. The 18th fret is one higher.

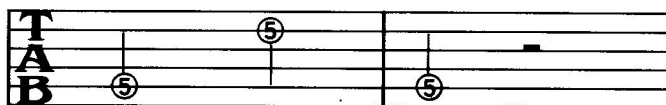
TIMING AND RHYTHM NOTATION

Rhythm notation will be covered briefly to summarize the basic notation learned in **Rhythm Guitar Volume 1 and 2**.

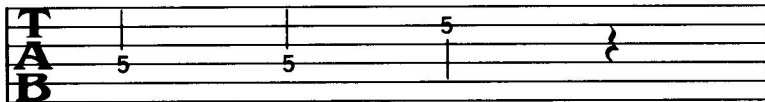
Whole notes and rests:
four beats each:



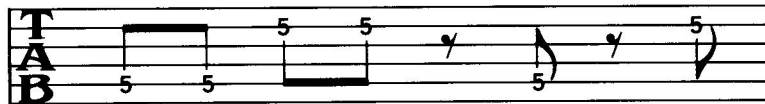
Half notes and rests:
two beats each:



Quarter notes and rests:
one beat each:



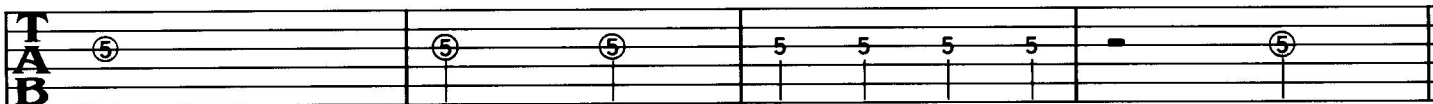
**Eighth notes and rests:
one-half beat each
(or two notes per beat):**



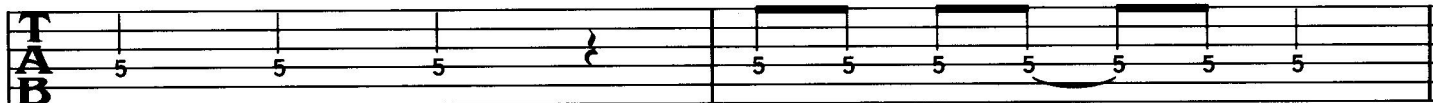
**Sixteenth notes and rests:
one-fourth beat each
(or four notes per beat).**



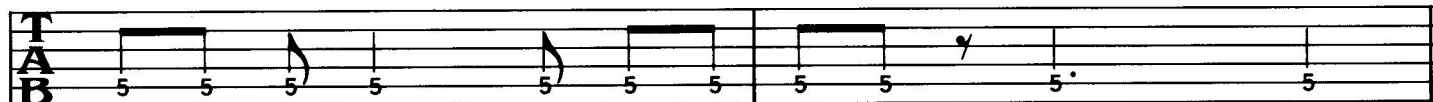
Play the following review exercises keeping a strong, steady beat with your foot. One each count, your foot should be down, and on each & your foot should be up. If you have trouble with this, refer to Rhythm Guitar Volume 1 of this series.



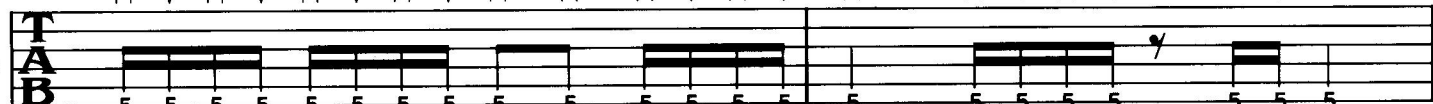
```
count:  1      2      3      4      (1  2)  (3  4)  1      2      3      4      (1  2)  (3  4)
```



```
count:  1      2      3      4      1  &  2  &  3  &  4
```



```
count: 1      &      2      (&      3)      &      4      &      1      &      2      (&      3      &)      4
```



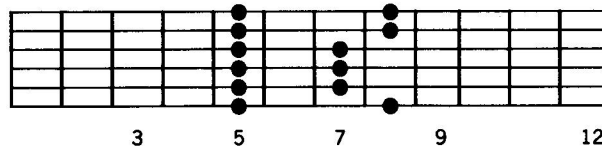
count: 1 e & a 2 e & a 3 & 4 e & a 1 2 e & a 3 & a 4

PART I

THE MINOR PENTATONIC SCALE

The most common pattern used for soloing is the minor pentatonic scale. Below, the scale is shown in the key of A. Notice that the first note of the scale is the "A" note, which is the root of both the A bar chord at the fifth fret as well as the A scale.

A minor pentatonic



ascending (up) descending (down)

5

fingering: 1 4 1 3 1 3 1 3 1 4 1 4 4 1 4 1 3 1 3 1 3 1 4 1

Listen to the tape several times to memorize how each riff sounds; then play over the notes and memorize their pattern. Where the asterisk (*) appears, change strings using the same finger for both notes. Roll your finger off of one string and onto the next instead of lifting it off of the fretboard. This will allow you to change faster and sound smoother.

Am

6

fingering: 3 3 1 3 3 1 3 1 3 1 4 1



Am

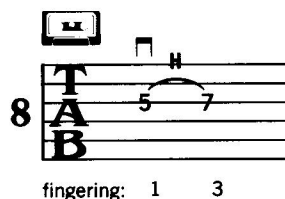
7



fingering: 1 4 1 3 1 3 1 1 4 1 3 1

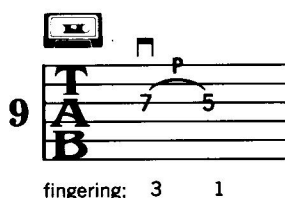
Note that you have memorized both the sound and the pattern of notes for each riff, practice them tapping your foot on each downbeat to get the feel of the rhythm.

THE HAMMER-ON AND PULL-OFF

Play the fifth fret, third string with your first finger. Then, hammer your third finger down on the seventh fret without picking. An "H" with a  or  indicates a hammer-on.

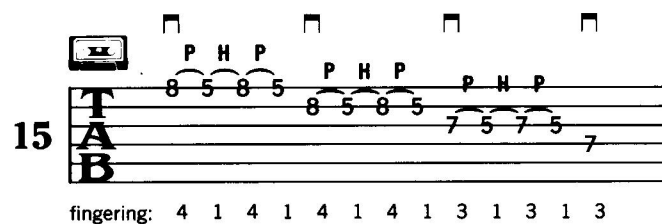
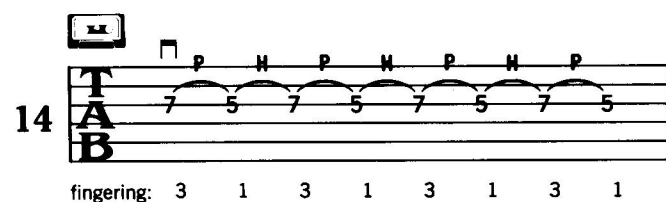
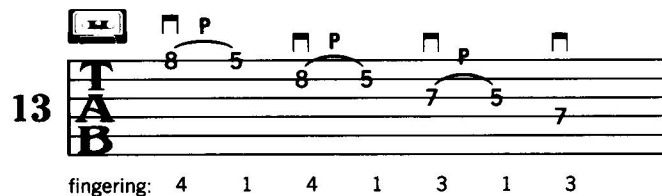
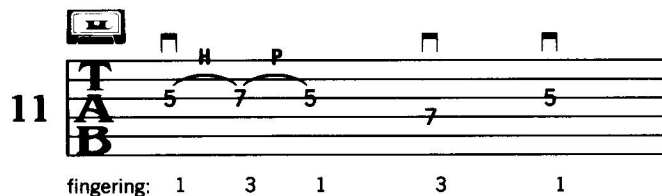
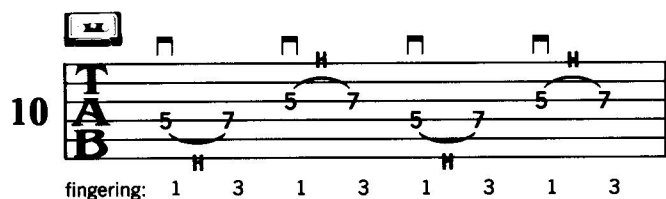


A pull-off is the opposite of a hammer-on. Place your third finger on the seventh fret, then pull your first finger down and off of the string to sound the fifth fret. A "P" with a  or  indicates a pull-off.



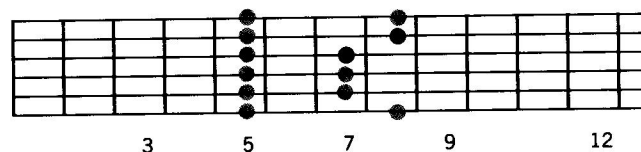
Do not confuse the hammer-on/pull-off symbols with the tie. Ties also use this symbol, but without an "H" or "P" and ties only connect notes that are both at the same fret.

Practice hammer-ons and pull-offs in the riffs below.



THE TWO-FRET BEND AND RELEASE

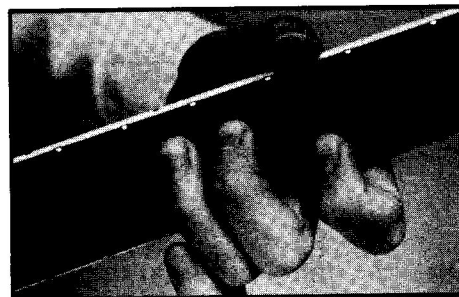
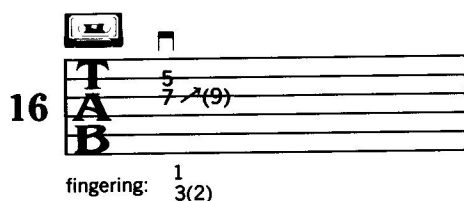
In this scale pattern, the two most commonly bent notes are:



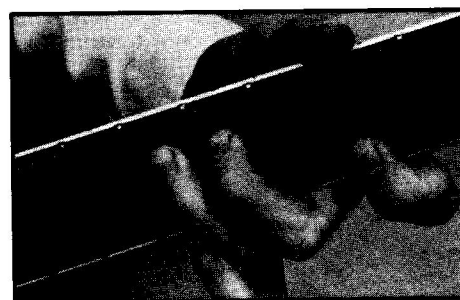
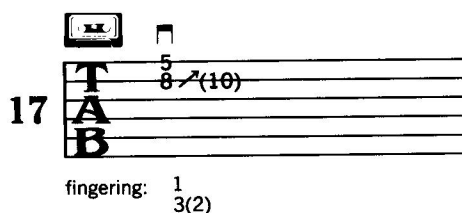
Below, the first number is the fret that you start on, the arrow indicates a bend, and the number in parenthesis is the pitch that the bend will reach.

Begin on the third string with your third finger on the seventh fret and your second finger close behind it to help push up the string. Put your first finger on the fifth fret, second string.

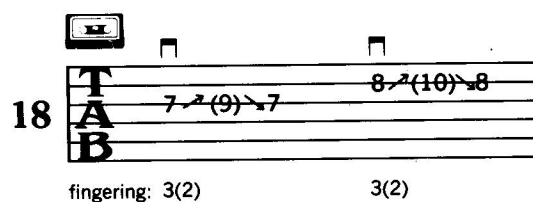
Push the string up until its pitch is the same as the second note. If your bend is accurate, the two notes will sound the same because the ninth fret, third string is the same note as the fifth fret, second string.



Do the following bend in the same way. Notice that the tenth fret, second string is the same pitch as the fifth fret, first string. If your bend is accurate, the pitch of both strings will be the same. Practice these bends until you get a feel for how far to bend the string for a two-fret bend.



A release is the opposite of a bend. After a note is bent, it is released by returning it to the original pitch. The release is shown by an arrow down.



Practice two-fret bends and releases in the following exercises. Make your bends sound like those on the cassette.

19

fingering: 1 3 3(2) 1

20

fingering: 1 3 3(2) 1

21

fingering: 1 3 3(2) 1 3 3(2) 1 3 3(2) 1

When the note stem is on the number in parenthesis (which is the destination of the bend) instead of the first number (which is the fret that the bend starts on), this indicates an immediate bend. Pick the first note and bend up immediately. In this case, the number that the bend starts on will be shown in smaller type.

22

fingering: 3(2) 1 3 1

23

fingering: 3(2) 1 3 1 3(2)

24

fingering: 3(2) 1 3(2) 1 3(2) 1 3(2) 1 4 1 3 1 3 1

ROCK CLICHÉS

The following patterns are so commonly used in solos that they are sometimes called rock clichés. These short groups of notes are often used as the building blocks for longer lead phrases.

In exercise 25, do not let the bent string continue to ring with the other notes. Remove the pressure of your third finger off of the fretboard as you pick the second note. Also, lay your first finger flat over the first and second strings with the top end of that finger touching the third string. When the third string moves back to its unbent position, it should be muted by the first finger. Quiet the lower sounding strings with your right hand. Let the second and third notes ring together.

25

fingering: 3(2) 1 1 3(2) 1 1 3(2) 1 1 3(2) 1 1

In exercise 26, bend immediately using your third finger (with the second finger next to it to help push); then release. As you release the bend, lift up your second finger so that it won't get in the way of the pull-off to the first finger.

26

fingering: 3(2) 3 1 3(2) 3 1 3(2) 3 1 3(2) 3 1

In exercise 27, bend up the first note, and then, without releasing that bend, pick the next note. Let both strings ring together.

27

fingering: 3(2) 4 3(2) 4

Exercise 28 is very similar to 27, except that the notes used are one string higher and both on the same fret. After both notes ring together, pick the last note (still bent) and then release.

28

fingering: 3(2) 4 3(2) 3(2) 4 3(2)

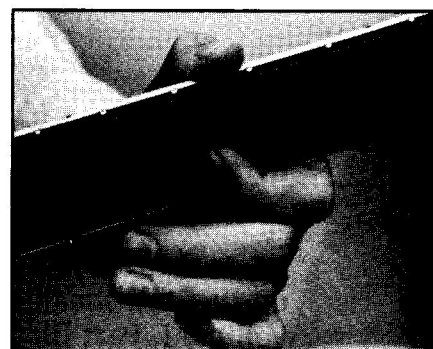
Practice each cliché until they sound like those on the cassette.

VIBRATO

Vibrato is a rapid series of small bends and releases. It not only makes the note sound more exciting, but it also gives much more sustain. Pivot your hand as shown in the photos to make the bends. The side of the knuckle of your first finger should be pressing against the guitar. Practice slowly making sure that each bend is fully released. Vibrato will be indicated by the symbol \sim .

29

fingering: 1



First, try to get at least three or four slight bends and releases. With practice, your vibrato will get faster and your sustain will increase to the point where, eventually, you can hold a note with vibrato for any length of time.

Practice vibrato on each note in the minor pentatonic scale. To achieve vibrato on the sixth string, pull down to bend. For vibrato on the first string, push up. All of the other strings may be either pushed or pulled.

30

fingering: 1 4 1 3 1 3 1 3 1 3 1 3 1

When vibrato is placed on a note already bent, release only slightly then quickly bend back and release slightly again. Continue doing this, trying to keep the small bends and releases all centered around the original bent note. This is difficult and will require time to develop. At first, try to bend and release slowly at least two or three times.

31

fingering: 3(2)

RESTS

Stop and hold all strings with the rear side of your right hand for the duration of all rests. (See Rhythm Guitar Volume 1)

32

count: 1 2 3 4 1 & 2 & 3 4

RHYTHMIC PATTERNS

Often a simple riff is made to sound more interesting by the use of common rhythmic patterns. Listen to exercise 33 to get the feel of the rhythm. Then practice it tapping steadily with your foot.

33

count: (1 & 2) (& 3 & 4)

When a group of notes lasting one and a half beats is repeated, it will begin first on the downbeat, then the upbeat, downbeat, upbeat, etc. (See Rhythm Guitar Volume I, Part III.)

Also, notes that fall on a downbeat are naturally emphasized more to the ear. So, even though you are simply repeating the same three notes, the rhythm naturally accents different notes on each downbeat.

34

count: (1 & 2) (& 3 & 4)

This technique is often used with the two-measure rhythm below.

35

count: (1 & 2) (& 3 & 4) (1 & 2 & 3 & 4)

It is important that you tap a steady beat with your foot in the riffs below or this rhythm effect will be somewhat lost.

36

count: (1 & 2) (& 3 & 4) (1 & 2 & 3 & 4)

37

count: (1 & 2) (& 3 & 4) (1 & 2 & 3 & 4)

RIFFS USING THE MINOR PENTATONIC SCALE

After you have memorized the sound and the note pattern of a riff, try tapping your foot with the beat while you practice it.

38

Am

ring

fingering: 3(2) 1 1 3 3(2) 4 1 3(2) 3 1 3

39

Am

fingering: 3 P 1 H 3 1 3 P 1 H 3 1 3 1 3 1 3(2)

40

Am

fingering: 1 1 1 3 1 H 3 1 3(2) 3 1 3

41

Am

ring

fingering: 3(2) 1 1 3(2) 1 1 3(2) 1 1 3(2) 4 3(2)

SPECIAL TECHNIQUES

Muting

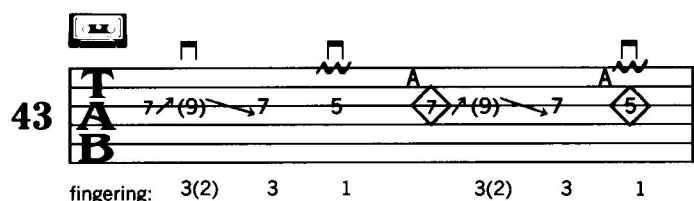
Muting is achieved by laying the bottom side of your right hand over the string near the bridge saddles. (See Rhythm Guitar Volume I, Part III) Muted notes will be indicated by an "x" placed over or below each number.



Artificial Harmonics

Artificial harmonics make the guitar sound as if it is screaming. They are also called pick harmonics or false harmonics.

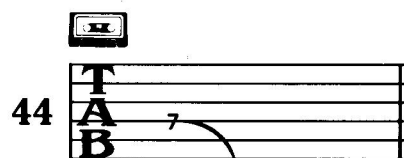
Hold your pick fairly close to the tip and turn it so that part of your thumb slightly touches the string. After picking, move your hand away immediately. Artificial harmonics will be indicated by a small "A" with the fret number in a diamond.



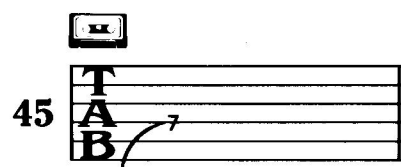
You can use artificial harmonics whenever you think they sound good. It is not necessarily important that you play them exactly where they are used on the solos.

The Slide

Play the note below and slide your finger down the neck and off of the string. Lift your finger off the fretboard after you slide down several frets.

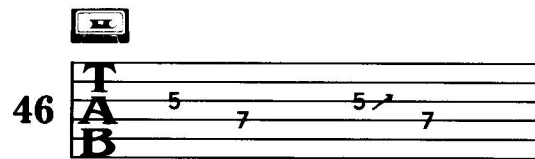


To slide up to a note, do the exact opposite. Pick the string as you touch the fretboard, and then slide up to the note. Make sure that your hand is moving as you touch the fretboard, or you will hear an unwanted note first, and then the slide up.



The "Blues" Bend

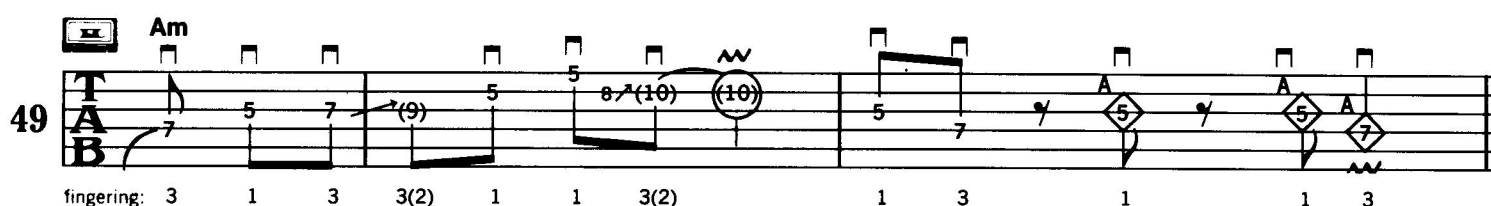
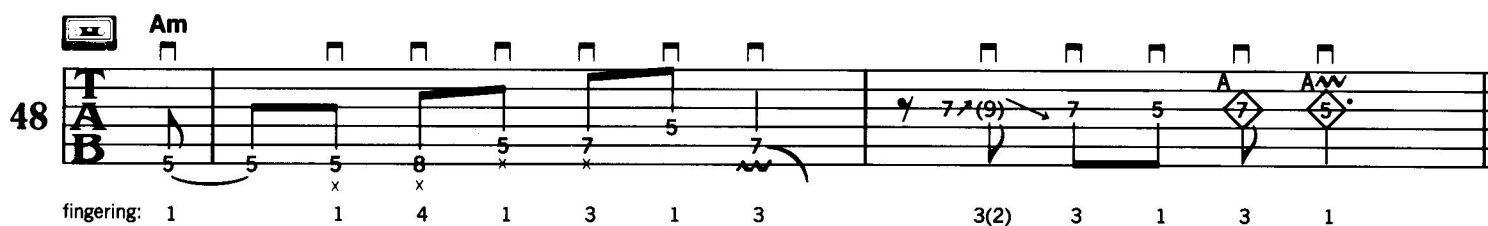
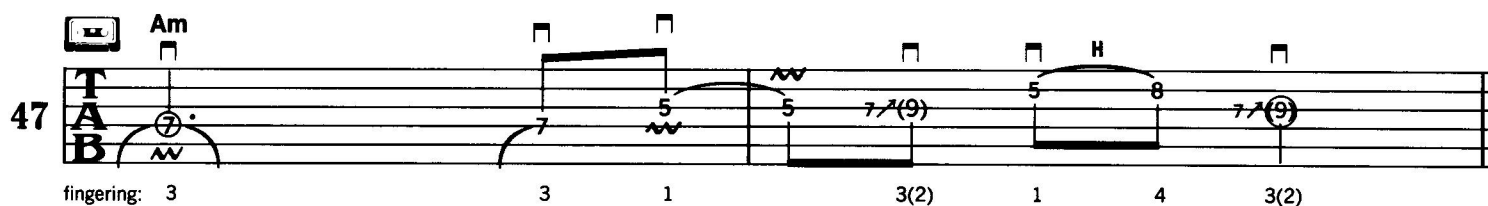
The "blues" bend is a very slight bend at the end of a note. Because it is short and subtle, it isn't particularly obvious but it does give a more "bluesy" feel. Below, the bend is shown with a small arrow. Pull the string down to bend. Listen to the difference between the notes played with no bend and with the bend.



These bends will not be indicated in the following riffs and solos, as you can give the music your own interpretation. You can use these bends wherever you think that they sound good.

RIFFS USING THE SPECIAL TECHNIQUES

The two-measure riffs below make use of muting, artificial harmonics, slight "blues" bends, and slides. Notice that some of the phrases have notes that lead into the first measure. These notes are called pick-up notes. (See Rhythm Guitar Vol 1, Part II.)



"Open Fire" uses eight phrases, each two measures long, except for the last phrase, which is three measures and extends on into the repeat of the introduction. Make sure that you practice each phrase separately before you try putting them all together. The phrases are numbered below.

On the cassette you'll hear the introduction followed by the solo. After the solo the rhythm track repeats the introduction and solo sections — this time without the lead guitar. After you have the solo down, practice playing it over this rhythm track. You can also try substituting different phrases that you have learned or try making up and using some of your own.

OPEN FIRE

(Solo #1) 

Am 12



fingering: 3 1 1 3 1 3 3 1 3 1 3

1 3 1 1 3 3 1 1 3(2) 3 1 3 1

3 1 3 1 3 1 4 1 4 1 3(2) 1 1 3(2) 1 1 3(2) 1

1 3(2) 1 1 3(2) 3 1 3(2) 3 1 3(2) 1 3(2) 4

1 3 3 3 3 1 3 1 3(2) 3 1 3 3(2) 3 1 3 1 3

1 3 1 3 3(2) 4 3(2) 3 1 3(2)

ring together

slide up to an indefinite point

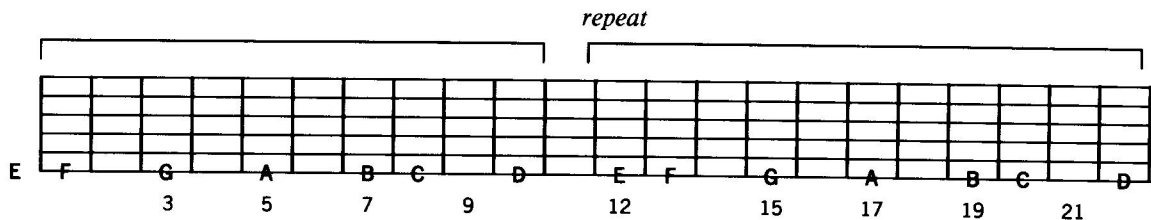
ring

(Rhythm track begins repeat of intro.)

PART II

NOTES ON THE SIXTH STRING

To play in different keys, you must know the names of the notes on the sixth string. The pattern of notes repeats at the twelfth fret. The names are the same but all are one octave higher.

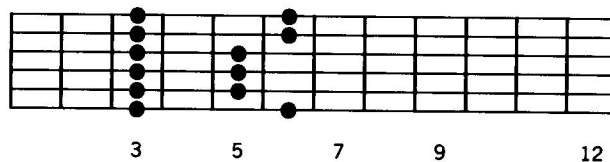


A **sharp** (#) raises a note one fret and a **flat** (b) lowers a note one fret. Therefore, in the above tab, each fret space that is not labelled can actually have two names. For example, the note at the fourth fret can be called either G# or Ab.

CHANGING KEYS

To solo in a different key, simply slide the scale patterns up or down the neck, placing the root note of the scale pattern on the note of the new key. The riffs below use the minor pentatonic scale pattern in different keys.

G minor pentatonic

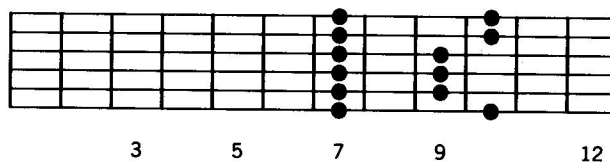


50

Gm

A musical notation for the G minor pentatonic riff. It consists of a single staff with a treble clef and a key signature of one flat (Bb). The riff starts with a pickup measure containing a quarter note G (fret 3) and a quarter note A (fret 4). The main body of the riff is an 8-measure phrase: measures 1-4 are eighth notes G, A, B, C; measures 5-8 are eighth notes D, C, B, A. The final measure is a whole note G (fret 3) with a wavy line above it. Fingering numbers are written below the staff: 3, 3, 3, 1, 3, 1, 3(2), 1, 1, 1, 3(2).

B minor pentatonic



51

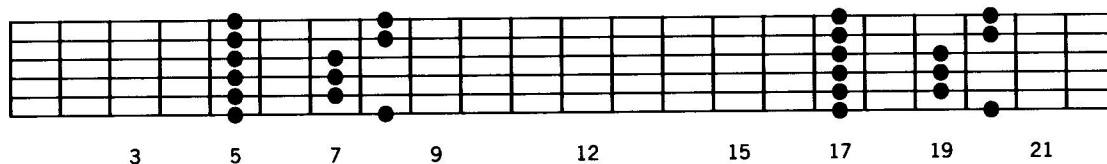
Bm

A musical notation for the B minor pentatonic riff. It consists of a single staff with a treble clef and a key signature of two flats (Bb, Eb). The riff starts with a pickup measure containing a quarter note B (fret 7) and a quarter note C (fret 9). The main body of the riff is an 8-measure phrase: measures 1-4 are eighth notes B, C, D, E; measures 5-8 are eighth notes F, E, D, C. The final measure is a whole note B (fret 7) with a wavy line above it. Fingering numbers are written below the staff: 3, 1, 3, 1, 3, 1, 3, 3, 1, 3, 3, 1.

THE OCTAVE POSITION

Another common form for the minor pentatonic scale is called the octave position. If you move any note up twelve frets, it will be the same note name, but one octave higher. Therefore, the scale form will be repeated identically twelve frets higher.

A minor pentatonic



The following riff uses the octave position in the key of Am.

51

Am

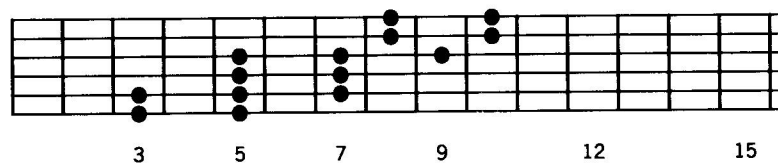
P

fingering: 2 1 3 1 3(2) 3(2) 3 1 2 2 1 2

THE MINOR PENTATONIC EXTENTION

This form is sometimes called the diagonal form because it moves diagonally through several different positions. A line between fret and fingering numbers indicates a slide between notes. A slide may or may not be picked.

A minor pentatonic



53

ascending

descending

fingering: 1 3 1 3-3 1 3 1 3-3 1 3 1 3 3 1 3 1 3 1-1 3 1 3 1-1 3 1 3

Play the following riff using this extended form.

54

Am

ring together

fingering: 3(2) 3 1 3 1 3 1 1 3 1 3 3 2

PICKING MECHANICS FOR SIXTEENTH NOTE RHYTHMS

Good right-hand technique is very important for playing fast, smooth runs as in solos by Yngwie Malmsteen, Randy Rhoads, and Van Halen. This section deals with developing the consistent picking format that you need to master fast and smooth picking. Consistent alternating picking will be covered in more detail in Part V, as well as in speed exercises throughout Volumes 1 and 2.

Review

Below, alternate picking consistently making sure that each beat begins with a downstroke.

55

1 e & a 2 e & a 3 e & a 4 e & a 1 e & a 2 e & a 3 e & a 4 e & a

When any two sixteenth notes are tied (joined together), they may be substituted with an eighth note. Miss the string for the tied note, but do not alter the picking pattern of the other notes. (See Rhythmic Guitar Vol 1, Part V, and Vol 2, Part IX.)

56

miss

57

miss

58

miss

Three tied sixteenth notes are 3/4 of a beat and may be substituted with a dotted eighth note (♩ = ♩.).

59

miss miss

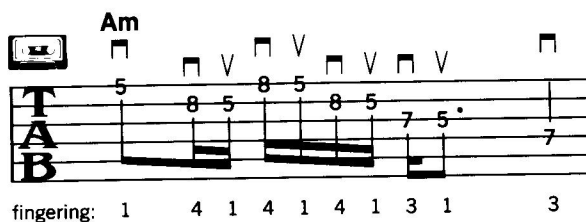
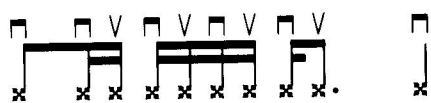
60

miss miss

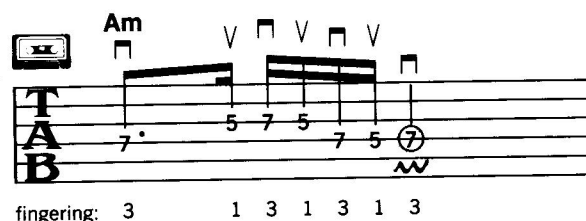
Combining Rhythms With Riffs

First, a rhythm is shown, followed by a riff. Practice the rhythm to get the feel of the picking. The riff is picked exactly the same.

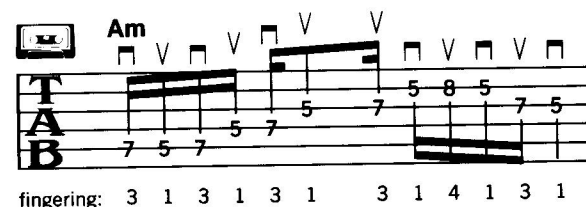
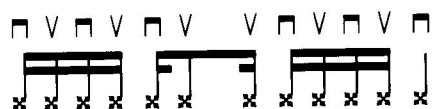
61




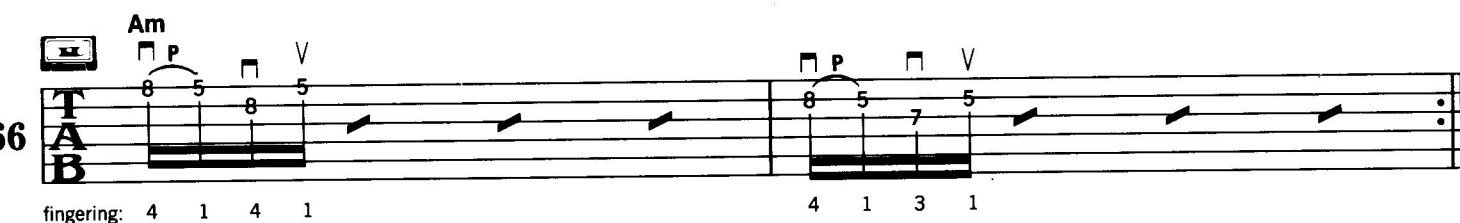
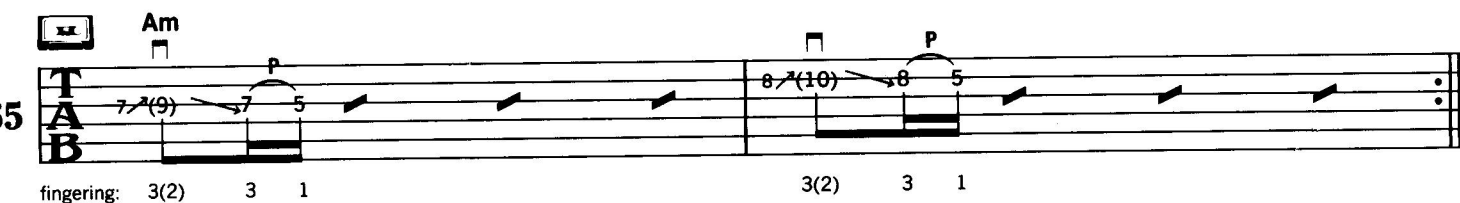
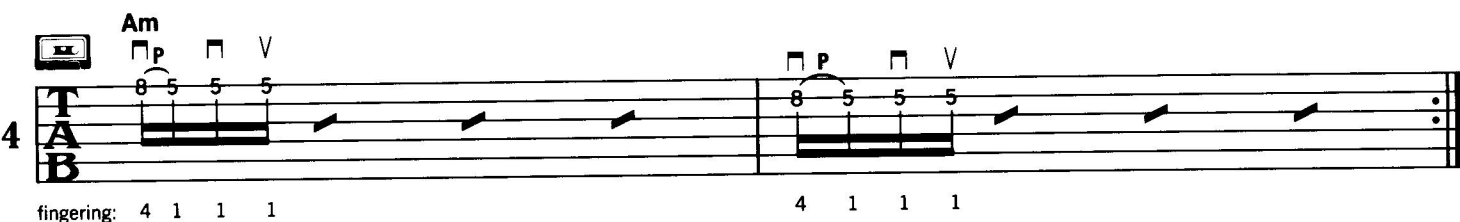
62



63




If you skip picking a note because it is a hammer-on, pull-off, bend, or release, miss the string with the pick for that note but do not alter the picking pattern of any other notes. The symbol  means to repeat the preceding figure.

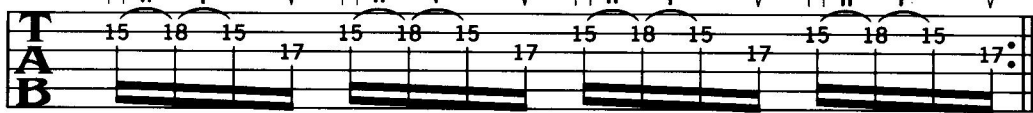


SPEED EXERCISES FOR "TO THE STAGE"


Listen to each exercise on the cassette and memorize the pattern of the notes. Finally, concentrate on the right-hand picking.


Each time you practice, begin slowly and evenly, gradually increasing up to top speed. Push the speed up just a little more and try to smooth it out; then slow back down. Play a pattern four times, then raise the position up one fret and repeat the pattern four more times. Continue doing this all the way up and back down the fretboard.

67  **Gn**




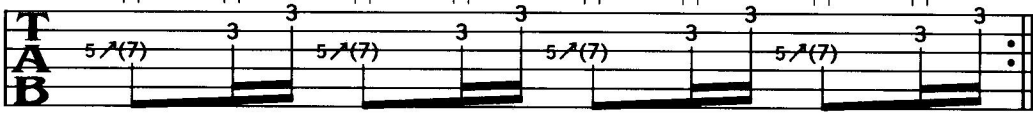
fingering: 1 3 1 2 etc.

68  **Gm**





fingering: 3(2) 3 1 3 1 3 1 etc.

69  **Gm**




fingering: 3(2) 1 1 etc.

70  **Gm**




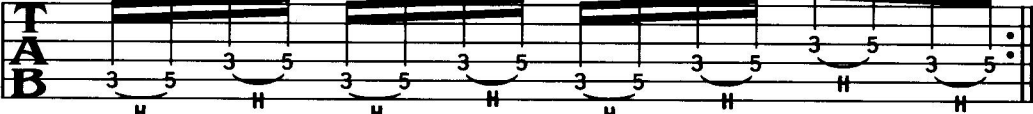
fingering: 3 1 3 1 etc.

71  **Gm**



fingering: 1 H 3 3 3 etc.

72  **Gm**



fingering: 1 H 3 1 3 etc.

TO THE STAGE

(SOLO #2) 

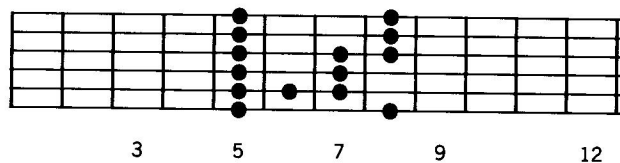
22

PART III

THE BLUES SCALE

The blues scale is the same as the minor pentatonic except for one additional note. Below, that note appears in two places in the scale pattern.

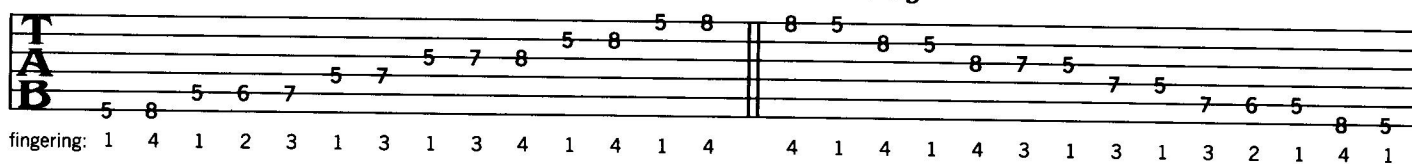
A blues scale



ascending

descending

73

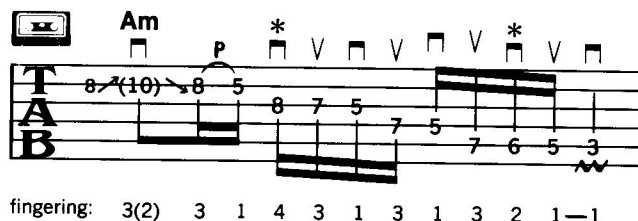


The additional note of the blues scale is marked with an asterisk (*) in the riff below.



Am

74



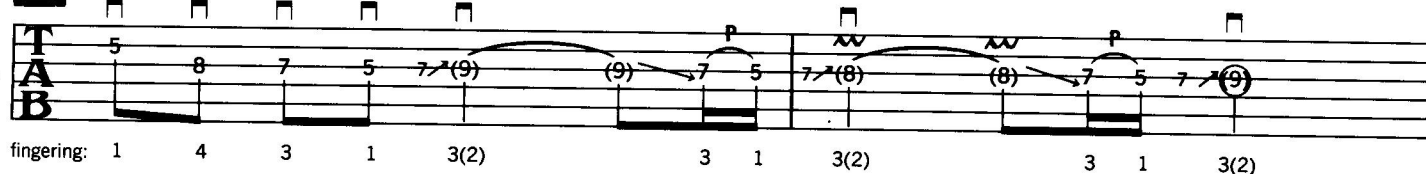
THE ONE-FRET BEND

Below, the additional note from the blues scale is played by bending up the note below it one fret. Listen for the difference between the two-fret and one-fret bends.



Am

75



When eighth-note triplets are played with continuous alternating picking, the first beat of triplets will begin with a downstroke while the second beat of triplets will begin with an upstroke. (See Rhythm Guitar Vol 2, Part XII.)

When eighth-note triplets are played with continuous alternating picking, the first beat of triplets will begin with a downstroke while the second beat of triplets will begin with an upstroke. (See Rhythm Guitar Vol 2, Part XII.)


76

Play the following licks using consistent alternating picking. This may require a little patience and practice. First, listen to the riff on the cassette and memorize the note pattern. Practice it paying attention only to the left-hand pattern (use all downstrokes). After you know the riff well, concentrate 100% on the alternating pick motion.

77

78

79

The swing rhythm is made by tying the first two notes of a triplet together so that the first note lasts 2/3 of a beat (). (See Rhythm Guitar Vol 2, Part XII).

This rhythm is easier to pick with a downstroke beginning on each beat.

80

Triplets are often picked with a downstroke on each beat when both the second and third notes of each group are hammer-ons, pull-offs, bends, or releases.

81

Am

fingering: 3 1 3 1 3 1 3(2) 3 1 3

The triplet groups in the first measure below are called **rolls**. Notice that some of the notes are not in the scale pattern. These are called **passing notes** and are not heard as strongly because they are not on the downbeat. (Remember that notes on the downbeat are naturally emphasized more to the ear than notes that are not on the downbeat.) Passing tones act as sort of a “lubricant” between the notes to “smooth out” the run.

82

Am

fingering: 1 2 3 1 2 3 1 2 3 1 2 3 1 3 1 3(2) 1 3(2)

The following riffs use picked triplets, hammer-ons, pull-offs, the swing rhythm, bends, and rolls. Pay close attention to the picking pattern after you have memorized the sound and the notes of the run.

83

Am

fingering: 3(2) 1 3 1 3 1 3 3(2) 3 1 3 1 2 3 1 1 3 1 2 3

84

Gm

fingering: 1 2 3 1 2 3 1 3(2) 1 1 4 1 3(2) 1 4 1 4 3 1

SPECIAL TECHNIQUES

The Pre-Bend

A pre-bend is played by first bending the string up to pitch, then, picking and releasing it. You shouldn't hear any of the original bend. (If you do, you are picking it too soon.) Pre-bends will be indicated by a "PB" with a bend arrow showing the release. There will not be an arrow bending up as with a normal bend. Listen for the difference between the normal bend and the pre-bend below.

85

fingering: 3(2) 3 1 3(2) 1

Make your bends sound like those on the cassette.

fingering: 3(2) 1 3(2) 3(2) 1 3 1 3(2) 1 3(2)

The Slow Bend

Long, held out notes are often bent slowly up or down because a moving note gives much more feeling and expression.

However, the speed of these bends will not be indicated because they are subject to interpretation. You should develop your own way to use them. This will give you greater control and more feeling and emotion in your soloing.

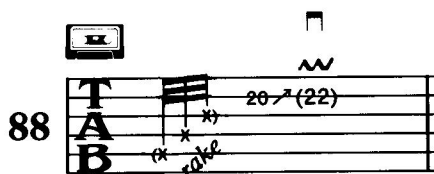
Listen for this slow bending in the exercise below, and try to make yours sound similar. You might need to turn up the gain (distortion) to increase your sustain. If you can't get enough sustain, these bends will be difficult to do. Hold the lower strings quiet with your right hand.

En.

fingering: 2 1 3(2) 3(2) 3 1 3 1

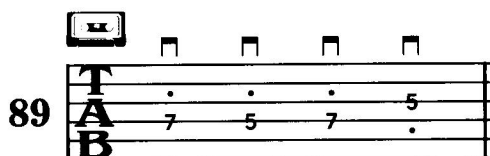
The Rake

Lightly touch and mute all strings with your first finger of your left hand, as well as the side of your right hand. Rake the pick across the strings and, when you get to the destination notes, lift your right hand off the strings. **Rakes** are indicated as below.



Staccato

Staccato means to play a note very short. It is indicated by a dot below (or above) a note. To play staccato notes, pick and immediately stop the string with the right hand.

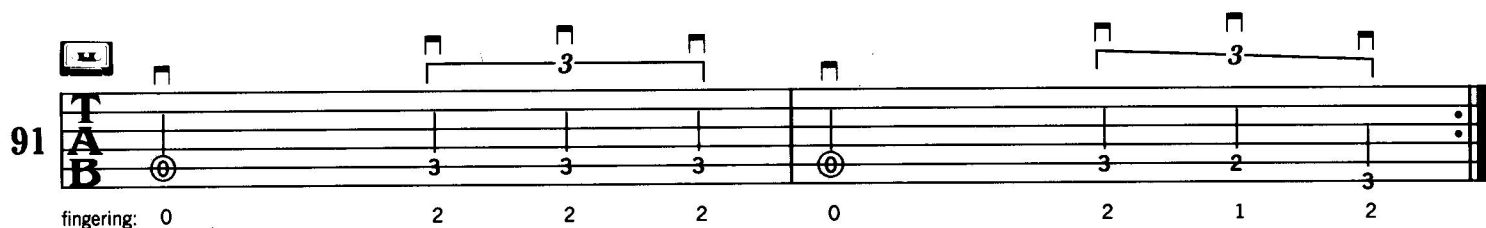


When a staccato indication appears on a bent note, stop the string as soon as the bend reaches its destination pitch. Notice the "bluesy" sound that this gives.

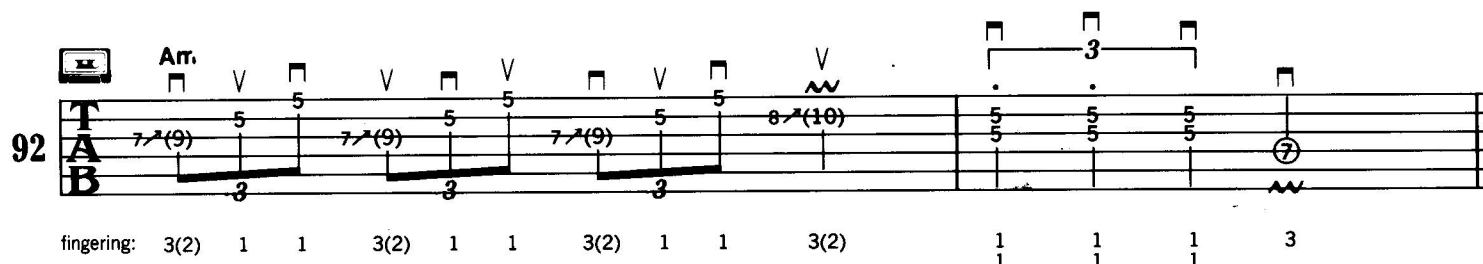


LAZY TRIPLETS

Quarter-note triplets are called lazy triplets because of their staggered feeling. These triplets are three notes evenly spaced over two beats and notated as below. (See Rhythm Guitar Volume 2, Part XII.)



Listen to the riff below and notice the staggered feeling of the lazy triplets. Lay your first finger flat to play two notes at once.

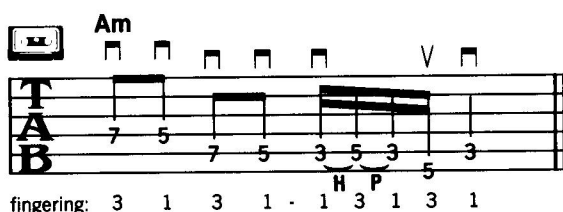


IMPROVISATION AND PHRASING

An improvised lead is one that is spontaneously created on the spot. Improvised solos can have the advantage of being fresher and more creative than preplanned and worked out solos. However, if you have a rather limited amount of riffs and scales to draw from, improvisation has the drawback that your solos may all sound alike. With some practice and a good knowledge of rhythm, you will be able to keep your improvising different and interesting.

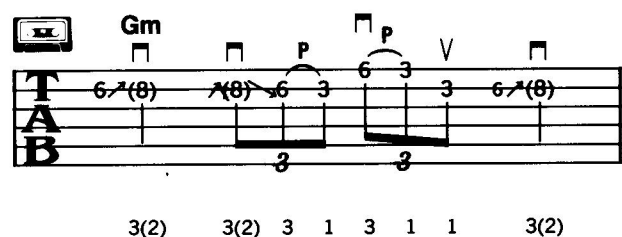
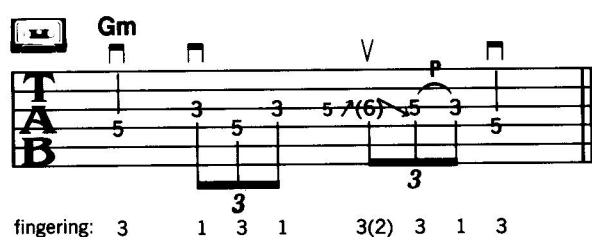
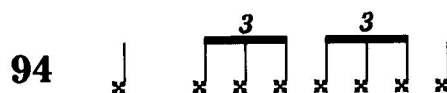
In learning to improvise, the most vital aspect is the ability to phrase your licks. A phrase is a musical "thought." It is to a solo what a sentence is to a paragraph. Phrasing includes choosing notes as well as a specific rhythm. Phrases are often one, two, or four measures long, and they may run together or overlap.

Below, a one-measure phrase is shown with a sample rhythm. First get familiar with the rhythm; then play the riffs below it. Notice how the riffs both use the same phrasing.

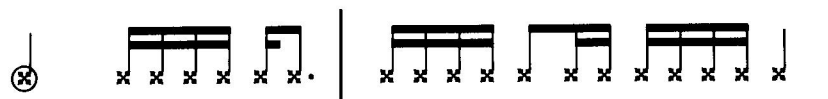


Now make up several riffs of your own using this same rhythm above but playing different notes. You may notice that some notes will sound better as beginning or ending notes. When you find some that sound good, remember them.

Below is a different rhythm. Play the following riff and make up some of your own using the same rhythm.



95



Em

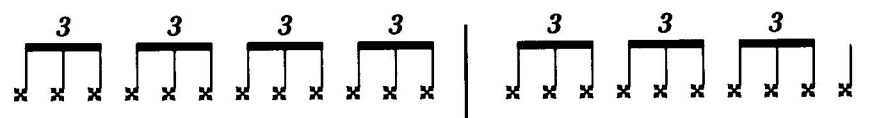
fingering: 3(2) 3(2) 3 1 3 3 1 3 1 3 1 2 1 1 3 1 3 1 3(2)

Em

fingering: 3 1 1 1 3 1 3 1 3 1 3 3(2) 3 1 3 1 3 1 3

Phrases use simpler rhythms (as the one below) especially when the riffs are faster.

96



F#m

fingering: 3 1 3 1 1 1 3 1 3 1 1 1 2 1 1 3 1 3 2 1 2 1

F#m

fingering: 3 1 3 1 3 1 3 1 3 1 3 1 3 1 3 2 1 2 3 2 1 0

Make up some of your own riffs using these phrases; then try making up some of your own phrases. Combining rhythms with notes gives an endless number of possibilities. After some practice you will be able to "feel" the length of the phrase and will no longer have to count out the beats.

"From The Heart" is a slow "metal blues" that uses every kind of bend including two-fret, one-fret, "blues" bends, pre-bends, and slow bends, as well as all of the special techniques.

This solo is made up of four four-measure phrases, however, they are not as simple as in "To The Stage." Here, phrase one has pick-up notes, phrases two and three run together, and phrase three runs over into the beginning of four. Try to give your bends the same feeling and expression. Also, you can experiment with improvising your own phrases over the rhythm track on the cassette.

FROM THE HEART

(SOLO #3) 

F#m

9

fingerings: 3 1 3 1 3(2) 1 3(2) 1 3(2) 1 3(2) 2 3(2) 1

1

2

3

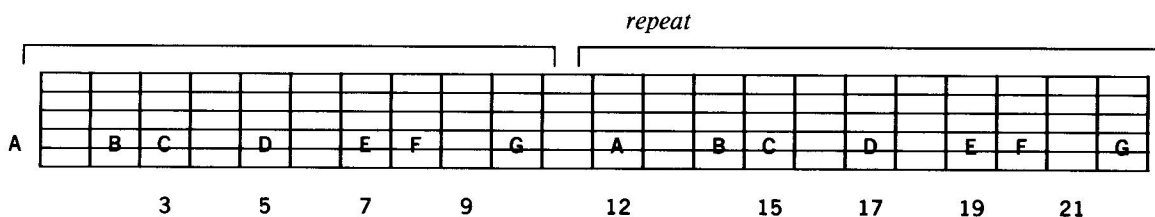
4

(Repeat intro.)

PART IV

NOTES ON THE FIFTH STRING

To play in different keys using scale forms with the root on the fifth string, you must first know the names of the notes on the fifth string.

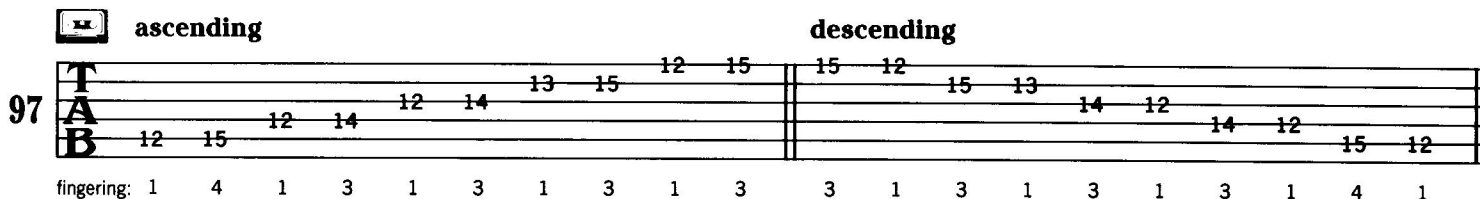
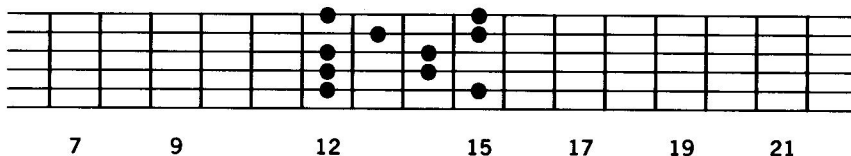


As before, use sharps and flats for the names of the notes in the fret spaces that are unlabelled. (Remember: sharp = up; flat = down.) Notice that all natural notes (not sharp or flat) are two frets apart except B and C, and E and F, which are only one fret apart. A distance of two frets is called a **whole step**; one fret is a **half step**.

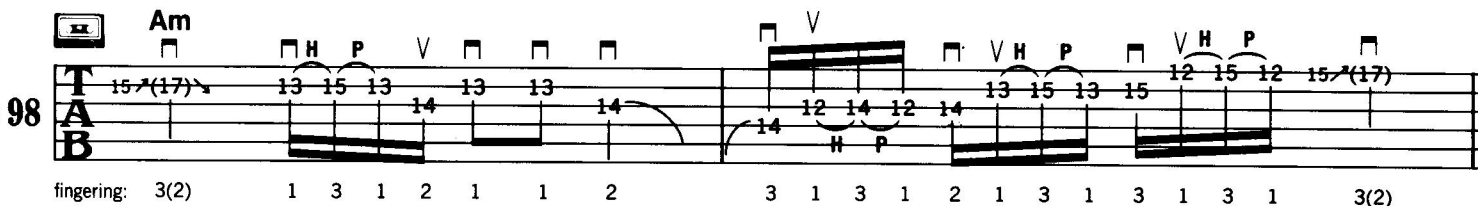
MINOR PENTATONIC FORM WITH ROOT ON FIFTH STRING

This form of the minor pentatonic scale has its root on the fifth string.

A minor pentatonic



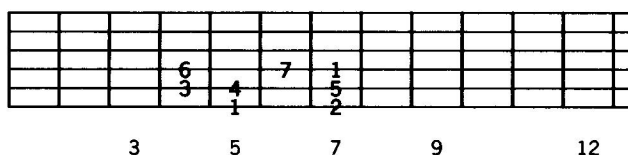
The following riff uses this new scale pattern.



UNDERSTANDING SCALE BASICS

All scales will be viewed in relation to the **major scale**, below. The notes of this scale are numbered in ascending order (1, 2, 3, 4, 5, 6, 7, 1) and these numbers are called **tones**.

A Major

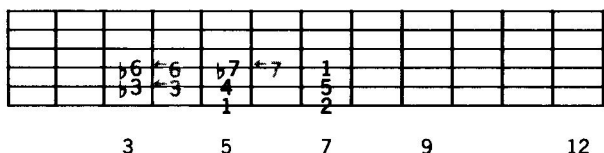


Remember that a note is a specific pitch with a letter name (e.g. A, C, F# . . .). A tone, however, is the number in the scale. (Do not confuse this meaning of the word tone with its other meaning: trebleness or bassyness).

Notice that the major scale above, although it has eight notes, has only seven different tones. The root, or first tone, appears twice. If you continue up or down the scale, the tones continue to repeat over and over in the same order (although the scale would be an octave higher or lower).

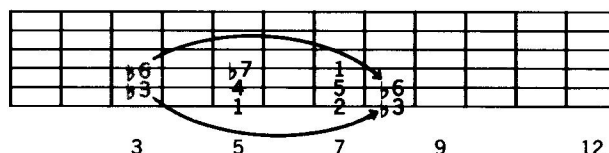
The **natural minor** scale (or "pure" minor) is also a seven-tone scale. It is the same as the major except for the third, sixth, and seventh tones, which are flatted in the minor scale. The tones of the natural minor scale are 1, 2, $\flat 3$, 4, 5, $\flat 6$, $\flat 7$, 1.

A natural minor



or,

A natural minor



Each one of the scales gives a different mood or feeling. Of course different people may have somewhat different impressions, but most would agree that the major scale feels basically bright, happy, light, or triumphant. The minor scale, on the other hand, is dark, sad, heavy, or medieval.

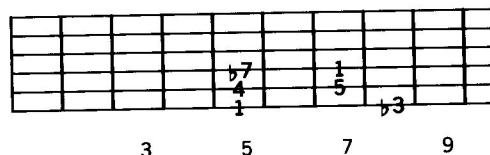
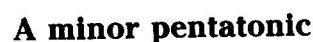
99  Listen to the mood or feeling of a melody in a **major** scale.

100  Listen to the mood or feeling of a melody in a **minor** scale.

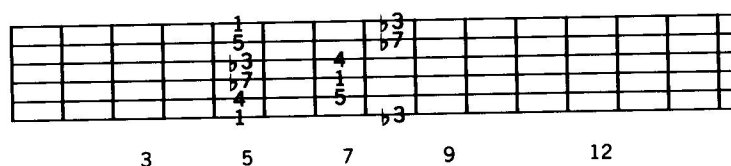
Although the major and minor scales are the most extreme opposites, each different kind of scale has its own feeling.

The minor pentatonic scale is a five tone minor scale. It is the same as the natural minor scale except that the second and sixth degrees are skipped in the pentatonic scale.

A natural minor



Memorize the tones in the minor pentatonic pattern.



101

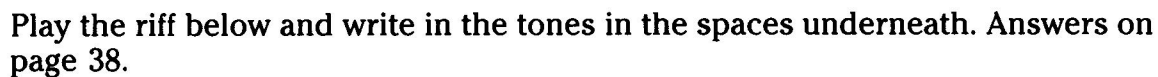
Am

fingering: 3 1 3 1 3 1 3 1 3(2) 3 1 3 1 3 1 3

Tones: _____

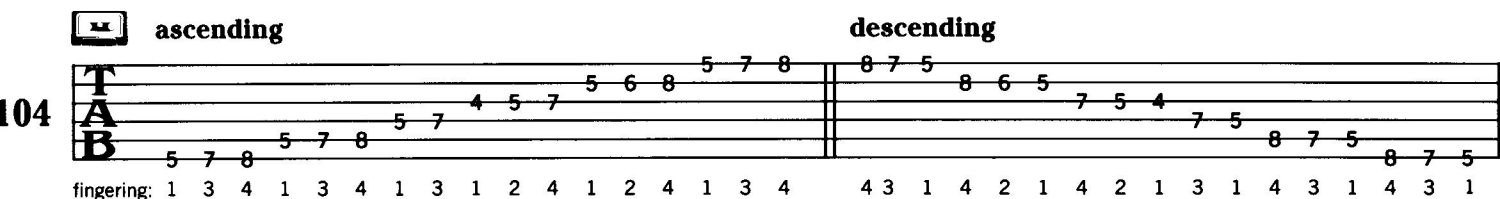
[illegible]

A minor pentatonic



THE NATURAL MINOR SCALE

A natural minor



The following licks use the natural minor pattern. Write in the tones used underneath. The second riff below uses the $\flat 5$ of the blues scale in addition to the notes of the natural minor. Answers on page 38.

105

Am

fingering: 3(2) 1 1 4 1 2 1 3 4 3 1 3(2)

Tones: — — — — — — — — — — — —

106

Em

fingering: 1 3 1 3 1 2 1 3 1 3 2 1-1

Tones: — — — — — — — — — — — —

Below is the natural minor scale pattern with the root on the fifth string. Notice the pentatonic pattern that you have already learned within the natural minor.

A natural minor

9 12 15 17 19 21

07

ascending descending

fingering: 1 3 4 1 3 4 1 3 1 2 4 1 2 4 4 2 1 4 2 1 3 1 4 3 1 4 3 1

The following riff uses this form of the minor scale. Write in the tones. Answers on page 38.

08

Am

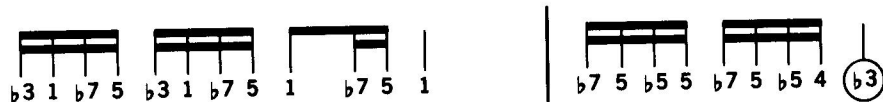
fingering: 4 2 1 4 2 1 4 2 1 4 2 1 3 1 4 3 4 3 1 4 1 3

Tones: — — — — — — — — — — — — — — — —

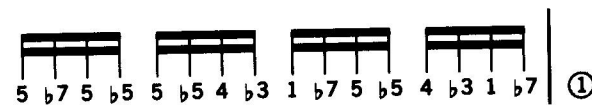
Answers

Riffs in the Minor Pentatonic Scale (or blues)

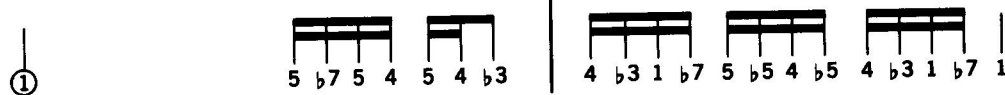
Exercise 101:



Exercise 102:



Exercise 103:

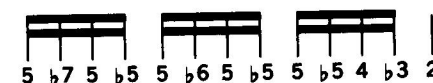


Riffs in the Natural Minor Scale (including b5 of the blues)

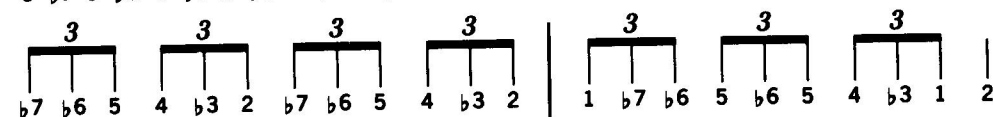
Exercise 105:



Exercise 106:



Exercise 108:



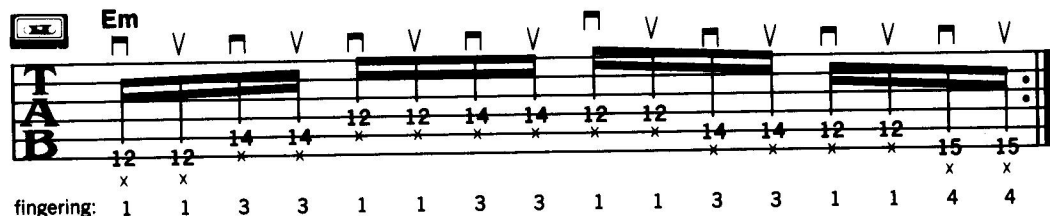
SPEED EXERCISES FOR "THE HEAVY SIDE"

Begin slowly! Make sure that your picking is correct. Slowly increase your tempo until you are going as fast as you can play smoothly. Then push yourself a little faster and try to smooth it out. To develop control as well as speed, you should spend just as much time playing slower than top speed as you spend playing at top speed.

109



110



THE HEAVY SIDE

(Solo #4)

39

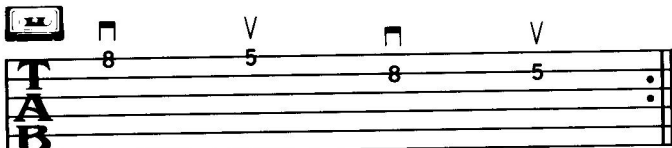
PART V

PICKING MECHANICS FOR CROSSING STRINGS

Continuous alternating picking while crossing between strings is one of the most difficult techniques to master, but well worth the effort. Listen to Yngwie Malmsteen or Al Dimeola for some well perfected cross string picking.

Practice the following exercises as speed exercises to develop faster cross-string alternating picking. The first exercise below crosses between strings one time.

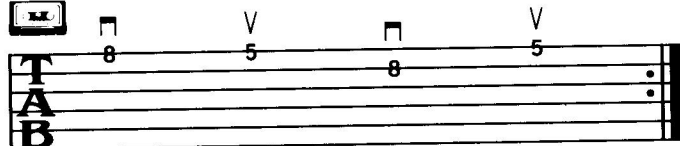
113



Exercise 113 is a single-measure exercise on a six-string guitar. It features a sequence of four notes: an 8th fret note on the 6th string, a 5th fret note on the 5th string, an 8th fret note on the 4th string, and a 5th fret note on the 3rd string. The notes are marked with a square icon and a 'V' above them, indicating a pick attack. The exercise is written on a standard six-line staff with the strings labeled T (top), A, and B (bottom) on the left.

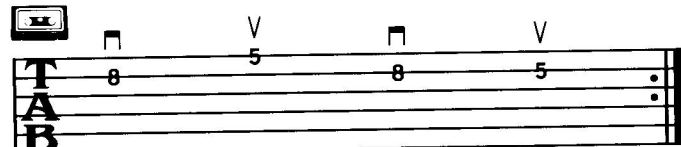
The next patterns cross between strings with an inward picking motion. This means that the direction of the picking motion on each string faces in (See photo).

114



Exercise 114 is a single-measure exercise on a six-string guitar. It features a sequence of four notes: an 8th fret note on the 6th string, a 5th fret note on the 5th string, an 8th fret note on the 4th string, and a 5th fret note on the 3rd string. The notes are marked with a square icon and a 'V' above them, indicating a pick attack. The exercise is written on a standard six-line staff with the strings labeled T (top), A, and B (bottom) on the left.

115




Exercise 115 is a single-measure exercise on a six-string guitar. It features a sequence of four notes: an 8th fret note on the 6th string, a 5th fret note on the 5th string, an 8th fret note on the 4th string, and a 5th fret note on the 3rd string. The notes are marked with a square icon and a 'V' above them, indicating a pick attack. The exercise is written on a standard six-line staff with the strings labeled T (top), A, and B (bottom) on the left.



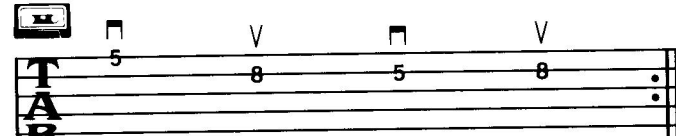
The opposite picking motion is that of outward picking (See photo). The following patterns use outward picking.

116



Exercise 116 is a single-measure exercise on a six-string guitar. It features a sequence of four notes: a 5th fret note on the 6th string, an 8th fret note on the 5th string, a 5th fret note on the 4th string, and an 8th fret note on the 3rd string. The notes are marked with a square icon and a 'V' above them, indicating a pick attack. The exercise is written on a standard six-line staff with the strings labeled T (top), A, and B (bottom) on the left.

117



Exercise 117 is a single-measure exercise on a six-string guitar. It features a sequence of four notes: a 5th fret note on the 6th string, an 8th fret note on the 5th string, a 5th fret note on the 4th string, and an 8th fret note on the 3rd string. The notes are marked with a square icon and a 'V' above them, indicating a pick attack. The exercise is written on a standard six-line staff with the strings labeled T (top), A, and B (bottom) on the left.



If you have a lot of difficulty on a particular picking pattern, make up runs and exercises that use that pattern and work out your trouble spots. Spend time right where you need it and you will improve fastest. You can also choose patterns that you already do well to use as building blocks to construct your fastest runs.

The exercise below makes use of a two-note contour played in sixteenth notes.

126

Am V etc.

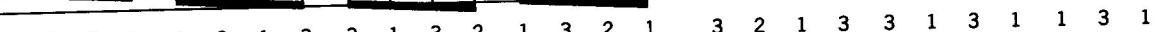
fingering: 1 4 3 1 4 3 1 4 3 1 4 3 1 1 3 2 1 4 2 1 4 2 1 4 2 4 1 2 3

The pentatonic and blues scales are contoured below. In the first exercise, the cross string picking pattern is very difficult. You can substitute this pattern with a pull-off to the second note, which makes the pattern easier. Randy Rhoads' first solo in "Mr. Crowley" and the solo in "Believer" both make use of this kind of contoured pattern.

[illegible]

Where there is an asterisk (*) below, roll your finger to change notes smoothly.


128




Em *
etc.

fingering: 3 1 3 1 1 3 1 3 3 1 3 2 1 3 2 1 3 2 1 3 3 1 3 1 3 1 3 1 3 3

There are many more possibilities than those shown here. Make up your own contours. You can try groups of six or eight or even longer and with more complicated patterns.

- 129**  Listen to a faster eight-note contour pattern.

- 130**  Listen to a twenty-four note contoured pattern with subcontours (contours within a longer overall contour).

Not only are these types of exercises good for developing cross-string picking, but they also make you think of notes in groups rather than separately. This will help you to be able to improvise faster runs as well as enable you to think of more ways to group notes.

USING SCALE CONTOURS IN RUNS

You can use parts of contoured scales in runs. However, be careful not to go overboard or your solos may begin sounding like exercises. When making up runs and solos try to listen to your notes instead of just watching the patterns.

Often, a run on a record that sound like it has a million notes played all over the neck, really turns out to be using a much smaller number of notes in just one position. Don't overdo it. Try recording yourself and listen to your runs to see if they really sound the way you think they do.

Note the contour patterns used in the runs below.

1

Am

fingering: 3(2) 1 2 3 2 1 2 3(2) 1 4 2 1 2 1 3 1 1 2 1 4 1

2

Em

fingering: 3 1 3 1 3 1 3 1 3 1 3 2 1 3 1 1 2 1 1

RHYTHMIC PATTERNS

Here, as in Part I, rhythmic patterns deal with repeating a group of notes so that with each repetition, a different note falls on each downbeat. Below is a six-note pattern repeated over sixteenth notes. After learning the notes, practice tapping your foot with the count.

33

Am

fingering: 3 1 2 1 3 1 3 1 2 1 3 1 3 1 3 1 3 1 2 1 3 1 3(2)

Below, a three-note pattern is repeated over sixteenths. Tap your foot with the beat or the rhythmic effect will be somewhat lost.

134

Bm

fingering: 3(2) 1 1 3(2) 1 1 3(2) 1 1 3(2) 1 1 3(2) 1 1 3(2)

The Dorian scale (or mode) is a seven-tone scale with the tones 1, 2, **b3**, 4, 5, 6, **b7**, 1. The only difference between Dorian and natural minor is the sixth degree. The Dorian scale feels brighter and less heavy, while the natural minor sounds darker and more “classical” or medieval. The sixth tone is labelled below.

A dot plot showing the number of books read by students. The horizontal axis is labeled with 3, 5, 7, 9, and 12. The vertical axis has 6 rows. There is 1 dot at 4, 5 dots at 5, 6 dots at 7, and 3 dots at 8. The number 6 is written next to the dot at 4 and the column for 7.

TAB

fingering: 1 3 4 1 3 1 2 4 1 2 4 1 3 4 1 3 4 4 3 1 4 3 1 4 2 1 4 2 1 3 1 4 3 1

136

TAB

fingering: 1 3 1 1 3 3 3 1 3 1 4 1 3 1 4 1 3 1 4 1 3 1 3(2)

137

TAB

fingering: 1 2 3 2 1 3 2 3 2 1 2 1 2 3 2 1 3 2 1

FASTER NOTES

Sixteenth-note triplets are six notes per beat. You can think of these as having a triplet on the downbeat (first half of the beat) and another triplet on the upbeat (second half). Play the sixteenth note triplet rolls below.

38

fingering: 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1 2 3 1

THE THREE AND FOUR-FRET BEND

Exercise 139 uses a four-fret bend and exercise 140 uses a three-fret bend. The scale pattern used is shown at the right. The note being bent and the destination pitch of the bend are shown in heavy print. Listen carefully to the pitch that your bend reaches.

39

fingering: 1 3 1 2 1 3(2,1) 3 1

12 15 17 19 21

40

fingering: 1 3 1 2 1-1 3 1 3 3(2)

12 15 17 19 21

SPEED EXERCISES FOR "DANGER AHEAD"

First, practice slowly keeping the picking smooth and even.

41

fingering: 1 3 3 3

43

fingering: 2 0 2 0 3 0 2 0 2 0 3 0 2 0 2 0

142

fingering: 1 2 4 1 2 4

144

fingering: 1 3 1 2

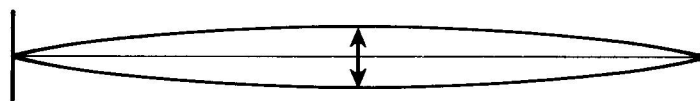
Parts of this solo sound reminiscent of Randy Rhoads, although most of his solos use the pentatonic and natural minor scales. The type of scale used is only one aspect of a style. The phrasing used, the notes stressed, the types of rhythms used and what the rhythm/bass guitar is doing underneath the lead all affect the overall feeling and style.

slide from an
indefinite point

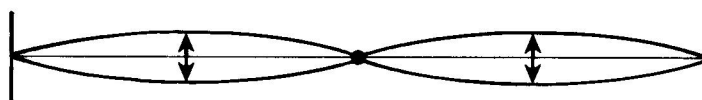
PART VI

NATURAL HARMONICS

The figure below shows how an open string vibrates.



When a string is stopped from moving in the middle, it vibrates like this:

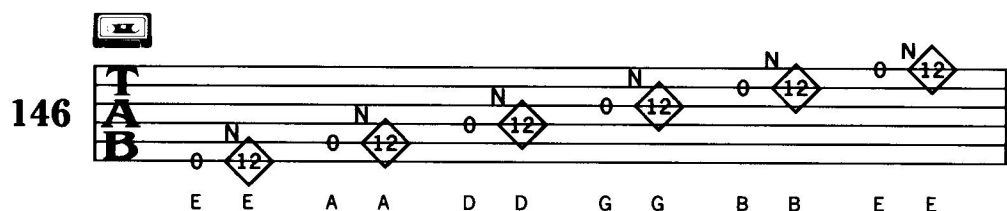


The place where the string does not move is called a **node**. In the second figure, the string vibrates twice as fast as the first figure, above, and the pitch goes up one octave.

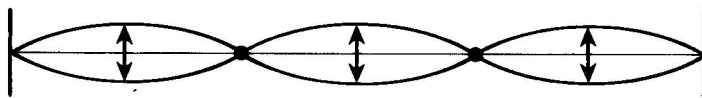
On the guitar, the twelfth fret is halfway between the nut and the bridge.

To play this harmonic, put your finger at the twelfth fret, but do not press down. Instead, touch the string lightly above the correct fret (NOT above the fret space, but directly above the metal fret itself). After picking the note, lift your finger off of the string.

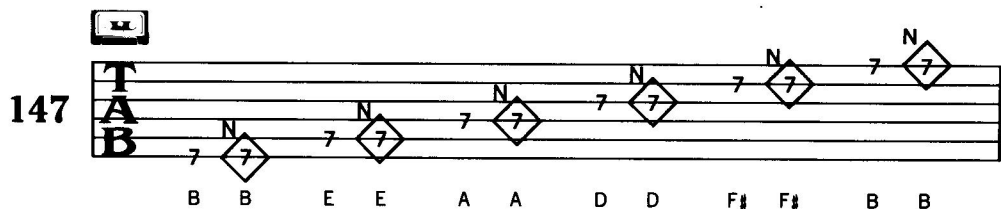
Natural harmonics will be indicated by placing the fret number in a diamond with a small "N". The harmonics below are all one octave above the open strings.



Natural harmonics occur wherever a string is divided into equal parts. When divided into three parts, a string vibrates like this:



The harmonic may be produced by touching either node, which are at the seventh and nineteenth frets. This harmonic is one octave and a fifth (a fifth is five tones of the major scale) above the open string. Or you can think of it as being just one octave above the note at the seventh fret.



Dividing a string into four parts raises the pitch two octaves above the open string. You can find this harmonic over the fifth fret.

148

E E A A D D G G B B E E

The harmonic located over the fourth fret divides the string into five parts which raises the pitch two octaves and a third (three tones of the major scale) above the open string. Or you can think of this harmonic as being two octaves above the note at the fourth fret.

149

G# G# C# C# F# F# B B D# D# G# G#

Dividing a string into six equal parts raises the pitch two octaves and a fifth above the open string. This occurs just slightly higher than the third fret. After this, the harmonic series continues, but the harmonics become more and more difficult to produce.

150

E G# B B D# F# G B D D

The following riff makes use of natural harmonics.

151

fingering:

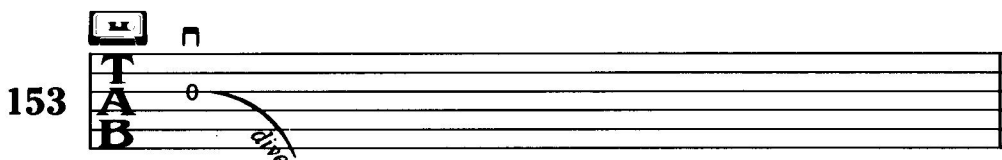
USING THE VIBRATO BAR

The vibrato bar, also called the whammy bar, whang bar, or tremolo arm, is a major part of the styles of many of the best guitarists including Van Halen, Brad Gillis, Steve Vai, and many others.

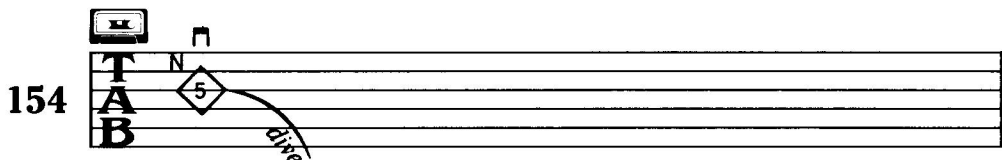
The simplest effect with the bar is dipping. This is done by slightly and quickly depressing and releasing the bar. Listen to exercise 152 and try to copy the sound.



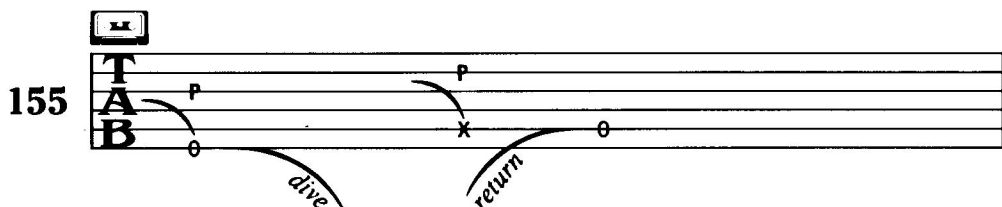
One of the most common effects with the bar is sometimes called divebombing. Below, pick the string open, let it ring out for a little bit, then push down the bar slowly at first, picking up speed. Make your dive sound like that on the cassette. A dive with the vibrato bar will be indicated as below.



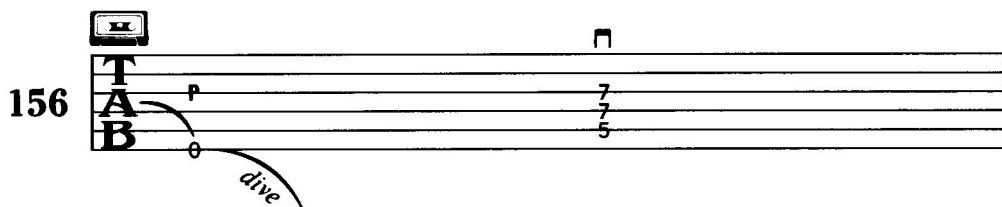
Divebombing is sometimes used on natural harmonics.



To get more sustain on the diving note, pull off with your left hand (from any fret) extra hard instead of picking the string. Below, pull off with the left hand, then, when the bar is down, pull off onto the next string and return the bar back up. Use the fingers and thumb of your left hand to keep the other strings quiet.



Below, release immediately back to normal pitch after the dive. Let the bar flip back to position at the same time that you pick the next chord. Try to eliminate raising the open string back up before the chord.



In exercise 157, slowly dive with the bar while playing the notes with hammer-ons and pull-offs. Hammer down the first note without a previous note sounding.

157

Below, do the same hammer/pull as before, but shake the bar up and down quickly.

158

Below is another technique that involves dipping the bar. Hammer down on the first note and at the same time, lightly press and immediately release the bar. Play the other notes with a hammer-on/pull-off. Then tap the bar again, and continue.

159

Here is another idea involving dipping the bar. This time, dip the bar as you hammer-on or pull-off each note.

160

Vibrato can also be put on harmonics with the bar. Listen to the cassette and copy the sound.

161

Below, pick the open string and dive. Next, touch the harmonic at the fifth fret (without picking) and release up to pitch. If you have a bar equipped to do so, continue pulling up past the original pitch; then dive again.

162

Experiment with these tricks and see what you can come up with on your own. Use your imagination!

RIGHT-HAND FRETTING

Popularized by Van Halen, right-hand fretting is widely used by most rock guitarists today. Begin the pattern below by hammering your right-hand index (or middle) finger down on the first note. The other notes are all produced by hammer-ons and pull-offs.

163

fingering: RH 1 3 etc.

You can also use pull-offs, or a combination of hammer-ons and pull-offs in the left hand notes.

164

fingering: RH 3 2 1 etc.

165

fingering: RH 3 1 3 etc.

In the riff below, sweep up the string with your right-hand first finger after you tap. As you slide it up the neck, pull off to sound the next note.

166

fingering: RH 1 3 RH 1 3 RH 1 3 1 RH 1 3 RH 1 3 RH 1 3 RH 1 3 1

Right-hand fretting can also be used together with bends. Below, bend the string up two frets, then fret with your right hand while keeping the string bent. Since the string remains bent, it will sound two frets higher than the note fretted with the right hand. For vibrato, use your left hand. The right hand does not move.

167

fingering: 3(2) RH 3(2) RH

Use this technique in the riff below.

168

fingering: 3(2) 3 1 3(2) RH 3(2) RH

SPEED EXERCISES FOR “INTO THE SPOTLIGHT”

Begin each exercise slowly and evenly.

169

fingering: 3 1 2 4 1 4 2 1 etc.

170

fingering: RH 1 3 etc.

171

fingering: 1 3 1 3 3 1 3 1 3 1 3 1 3 1 3 1-1 3

172

fingering: 1 3 1 2

INTO THE SPOTLIGHT

(Solo #6) 

54